| Index of Claims | Application/Control No. |            | Applicant(s)/Patent under Reexamination |  |  |  |  |  |  |
|-----------------|-------------------------|------------|-----------------------------------------|--|--|--|--|--|--|
|                 | 10/829,452              | GHIGO ET A | AL.                                     |  |  |  |  |  |  |
|                 | Examiner                | Art Unit   |                                         |  |  |  |  |  |  |
| 12 E101   1101  | Nancy T. Vogel          | 1636       |                                         |  |  |  |  |  |  |
| (Through        |                         |            | 7                                       |  |  |  |  |  |  |

|   |          |          |   |   |                |                   |      |    |          |       | ٦.    |   |          |      |  | ٦ |  |  |
|---|----------|----------|---|---|----------------|-------------------|------|----|----------|-------|-------|---|----------|------|--|---|--|--|
|   | <b>√</b> | Rejected | _ | ( | Througi<br>Can | h numei<br>celled | ral) | N  | Non-Ele  | ected |       | A | Appeal   |      |  |   |  |  |
|   | =        | Allowed  | + |   | Rest           | Restricted        |      |    | Interfer | ence  |       | 0 | Objected |      |  |   |  |  |
| n |          | Date     | ) |   | Claim          | n T               | Da   | te |          | С     | laim  |   |          | Date |  | _ |  |  |
| 2 | 10       |          |   |   | nal            | lalla (c          |      |    |          | nai   | ginal |   |          |      |  |   |  |  |

| Cla           | aim      |    |        |              |          | [        | Date          | e                                                |                                                  |        |                                                  | 1 | Cla      | im        |                                                  |          |              |                | ate      | ;        |          |          | 7        |          | Clain |                     |          |        |        | Da     | e          |          |                                                  |                 |    |
|---------------|----------|----|--------|--------------|----------|----------|---------------|--------------------------------------------------|--------------------------------------------------|--------|--------------------------------------------------|---|----------|-----------|--------------------------------------------------|----------|--------------|----------------|----------|----------|----------|----------|----------|----------|-------|---------------------|----------|--------|--------|--------|------------|----------|--------------------------------------------------|-----------------|----|
|               |          | is | 1      | Τ            |          |          |               |                                                  | П                                                |        | Π                                                | 1 |          |           | (C                                               | Г        | Γ            |                | $\neg$   | T        |          | $\top$   | 7        |          |       |                     |          | Т      | Т      | Τ      | Π          |          |                                                  | П               |    |
| Final         | Original | 1  |        | ı            | -        |          |               |                                                  | 1                                                |        |                                                  |   | Final    | Original  |                                                  |          |              |                | - 1      | 1        | - [      |          |          | Final    | Į.    | S S                 |          |        | 1      |        | i          | l        |                                                  |                 | i. |
| i i           | .E.      | 2  | -      | ı            |          | 1        |               |                                                  |                                                  |        |                                                  |   | l iĒ     | rig       | 2                                                |          |              |                | - 1      |          | ł        |          |          | it       | -   : | ₹                   |          |        |        |        |            |          |                                                  |                 | i  |
|               | 0        | 01 |        |              | -        |          |               | 1                                                |                                                  |        |                                                  |   |          | O         |                                                  |          |              |                | -        |          | - 1      |          |          |          |       | _ ا                 |          |        |        |        |            |          |                                                  |                 | i. |
|               | 1        | 0. | 7      | Т            | $\neg$   |          |               |                                                  | Т                                                |        | T                                                | 1 |          | 51        | ÷                                                |          |              |                | $\neg$   | ヿ        |          |          | 7        |          | 10    | )1                  |          | Т      | Τ      | T      |            | П        |                                                  |                 | i  |
|               | 2        | 1  | T      | T            |          |          |               |                                                  | Т                                                |        | T                                                | 1 |          | 52        | ı                                                |          |              |                | $\neg$   |          |          |          | ٦        |          | 11    | )2                  |          | T      | T      | Τ      |            |          |                                                  |                 | i  |
| $\neg$        | 3        | П  | T      | T            | 寸        |          |               |                                                  | 1                                                |        |                                                  | 1 |          | 53        |                                                  |          | Г            |                | $\neg$   |          |          |          | ٦        |          |       | 03                  |          | $\top$ | 1      | 1      |            | Π        |                                                  |                 | i. |
|               | 4        | П  | T      | T            |          |          |               |                                                  | Τ                                                |        |                                                  | 1 |          | 54        | П                                                |          | Г            |                |          | $\neg$   |          |          | ٦        |          |       | )4                  |          | $\top$ | 1      | 1      |            |          |                                                  |                 |    |
|               | 5        | П  |        | T            |          |          |               |                                                  | Т                                                |        | T                                                | 1 |          | 55        | π                                                |          |              |                | $\neg$   | T        |          |          | ٦        |          |       | 55                  |          | T      | Τ      | Т      |            |          |                                                  |                 | i  |
| $\neg$        | 6        | П  | П      | 1            | ٦        |          |               |                                                  | 1                                                |        | 1                                                | 1 |          | 56        | П                                                |          |              |                |          | $\neg$   |          |          |          |          |       | 06                  |          | T      | $\top$ | T      |            |          |                                                  |                 | i  |
|               | 7        | Г  | ĦΠ     | T            | T        |          |               |                                                  | Τ                                                | 1      | T                                                | 1 |          | 57        | T.                                               |          | П            |                | $\neg$   | $\neg$   |          |          | 7        |          |       | 77                  |          | T      | $\top$ | Τ      |            | Г        |                                                  |                 | i  |
|               | 8        |    | П      | T            | T        |          |               |                                                  | Т                                                |        |                                                  | 1 |          | 58        | 1                                                |          | П            |                | $\neg$   | $\neg$   | 1        |          |          |          |       | 08                  |          |        | T      | Τ      |            |          |                                                  |                 | i  |
|               | 9        | П  | т      | +            | T        |          |               |                                                  |                                                  | Ť      | 1                                                | 1 |          | 59        | Ι΄                                               |          |              |                | $\neg$   | $\neg$   |          | $\neg$   | 7        |          |       | 9                   |          | $\top$ | $\top$ | $\top$ |            |          |                                                  |                 | i. |
|               | 10       | П  |        | 7            | ┪        |          |               | Т                                                | $\vdash$                                         | 1      |                                                  | 1 |          | 60        | Т                                                | $\vdash$ | Г            | П              | $\neg$   | ヿ        | $\neg$   |          | 7        |          |       | 10                  |          | 1      | 1      | $\top$ |            | $\vdash$ |                                                  |                 | i  |
|               | 11       | П  | П      | $\top$       | $\neg$   |          |               |                                                  | 1                                                |        | 1                                                | 1 |          | 61        | Г                                                |          | П            |                | $\neg$   | $\neg$   | 一        | 1        |          |          |       | 11                  |          | T      | $\top$ | Т      |            |          |                                                  |                 | ì  |
| $\dashv$      | 12       | П  | Т      | 十            | 7        | _        |               | T                                                | 1                                                | 1      | 1                                                | 1 |          | 62        | Г                                                |          |              | П              |          |          | T        | $\top$   | 1        |          |       | 12                  | $\neg$   | 丁      | 丁      | Τ      | T          | Г        | Г                                                | П               | i  |
|               | 13       | П  |        | $\dagger$    | 7        |          | Т             | T                                                | T                                                | 1      | T                                                | 1 |          | 63        | T-                                               |          |              | М              | $\neg$   | _        | _        |          | 1        |          | 1     | 13                  | _        | 1      | +      | Т      | $\uparrow$ |          | Г                                                | Н               | i  |
|               | 14       | П  | T      | $\dagger$    | 7        |          |               |                                                  | Ī                                                |        | 1                                                | 1 |          | 64        |                                                  | <b></b>  |              | П              | $\neg$   | $\neg$   |          |          | ٦        |          |       | 14                  | $\neg$   | $\top$ | 1      | T      | T          |          |                                                  | П               | i  |
|               | 15       | П  | T      | +            | 7        |          | Т             | Т                                                | 1                                                | $\top$ | 1                                                | 1 |          | 65        | T                                                | <u> </u> |              | $\sqcap$       | ┪        | $\neg$   | $\neg$   | $\neg$   | 7        |          | 1     | 15                  | $\top$   | $\top$ | $\top$ | T      | $\top$     |          |                                                  | П               | i  |
|               | 16       | П  | Ť      | $\dagger$    | $\dashv$ | _        | $\overline{}$ | _                                                | 1                                                | 1-     | 1                                                | 1 |          | 66        |                                                  | Г        | Г            | П              | $\dashv$ | $\neg$   |          | _        | 7        |          |       | 16                  | $\top$   | 1      | 1      | 1      | 1          | П        |                                                  | П               | į. |
|               | 17       | H  | T      | $\dagger$    | $\dashv$ | .        |               |                                                  | T                                                | †      | †                                                | 1 |          | 67        |                                                  | Г        | Г            | П              | _        | $\neg$   | _        | _        | 1        |          | 1     | 17                  | $\top$   | $\top$ | $\top$ | T      | 1          | T        |                                                  | П               | i  |
|               | 18       | Н  | Ť      | 十            | $\dashv$ | _        | _             | Г                                                | 1                                                | +      | 1                                                | 1 |          | 68        |                                                  |          | Т            | Н              | _        | _        | 一        | $\neg$   | 7        |          |       | 18                  |          | $\top$ | $\top$ | T      | 1          | T        |                                                  | П               |    |
|               | 19       | Н  | T      | $\dagger$    | 7        | _        |               | T                                                | T                                                | +-     | 1                                                | 1 |          | 69        | Г                                                |          | Г            | П              |          | 一        | ヿ        | $\neg$   | 1        |          | 1     | 19                  | T        | 1      | $\top$ | T      | $\top$     |          |                                                  | П               |    |
| $\neg$        | -20      | Н  | +      | $\dagger$    | 7        | _        |               | <u> </u>                                         | † =                                              | +-     | <del>                                     </del> | 1 |          | 70        | T                                                |          |              |                |          | ヿ        | ╛        | _        | 7        |          |       | 20                  | T        | $\top$ | 十      | $\top$ | 1          | T        |                                                  | П               |    |
|               | 21       | H  | ╅      | $\dagger$    | 7        |          |               |                                                  | T                                                | T      | †                                                | 1 |          | 71        |                                                  | _        | Г            |                | 一        | $\neg$   | $\neg$   |          | ┪        |          | 1     | 21                  | Ť        | $\top$ | 十      | T      | t          |          |                                                  | П               |    |
|               | 22       | Н  | ╁      | 十            | ┪        |          | _             | Г                                                | <del>                                     </del> | 1-     | +-                                               | 1 |          | 72        | 一                                                |          | _            |                |          | _        | ╛        | _        | ┪        | $\vdash$ |       | 22                  | 7        | Ť      | Ť      | T      |            | T        |                                                  | П               |    |
|               | 23       | Н  |        | $\dagger$    | 7        | _        | _             | ╁                                                | 1                                                | T      | 1                                                | 1 |          | 73        | Г                                                |          | Г            | П              |          |          | 7        | _        | 7        | 1        | 1     | 23                  | 1        | $\top$ | 1      | 1      |            |          | $\vdash$                                         | П               |    |
| _             | 24       | Н  | +      | $\dagger$    | ┪        |          | $\vdash$      | ┢                                                | +                                                | †=     | †                                                | 1 |          | 74        |                                                  |          | <u> </u>     |                | $\dashv$ |          | ヿ        |          | 1        | _        |       | 24                  | _        | +      | ╅      | ┪      | $\dagger$  | 1        | Г                                                | П               |    |
|               | 25       | H  | $^{+}$ | $^{\dagger}$ | ┪        | -        | <b></b> -     | $\vdash$                                         | 1                                                | +      | †-                                               | 1 |          | 75        | H                                                |          | $\vdash$     |                | $\dashv$ |          | $\dashv$ | $\neg$   | ┪        | -        | 1     | 25                  | $\top$   | 十      | $\top$ | ✝      | $\top$     |          | Г                                                | Н               |    |
|               | 26       | H  | +      | +            | ┪        |          | $\vdash$      | $\vdash$                                         | +                                                | †-     | +-                                               | 1 | <u> </u> | 76        | $\vdash$                                         |          | T            | Н              |          | $\dashv$ | _        | _        | ┪        | <b>—</b> | 1     | 26                  | 7        | T      | ╈      | T      | 1          |          |                                                  | H               |    |
|               | 27       | H  | +      | $^{\dagger}$ | ┪        |          | $\vdash$      | T                                                | Τ.                                               | +-     | †                                                | 1 |          | 77        | t                                                |          | T            | Н              | $\dashv$ | $\dashv$ | _        | _        | 7        | $\vdash$ | 1     | 27                  | 十        | $\top$ | $\top$ | $\top$ | $\top$     |          | -                                                | Н               |    |
|               | 28       | Η  | +      | ╅            | 7        |          | $\vdash$      | $\vdash$                                         | t                                                | 十      | +                                                | 1 | -        | 78        | T                                                | _        | $\vdash$     |                | 寸        | $\dashv$ | 寸        | $\dashv$ | ┪        | -        | 1     | 28                  | _        | $\top$ | +      | T      | T          | İ        |                                                  | Н               |    |
|               | 29       | ┧  | ╁      | ╗            | 7        |          | $\vdash$      | H                                                | +                                                | ╁      | +                                                | 1 | <b>—</b> | 79        | $\vdash$                                         | $\vdash$ | <del> </del> | Н              | -        | $\dashv$ | $\dashv$ | _        | $\dashv$ | _        |       | 29                  | $\dashv$ | +      | +      | ╈      | +          |          | -                                                | Н               |    |
| -             | 30       | Η  | ╁      | ╅            | ┪        |          | -             | $\vdash$                                         | $\vdash$                                         | +      | +                                                | 1 | -        | 80        | -                                                |          | +            | Н              | $\dashv$ | -        | $\dashv$ | -        | ┪        |          | 1     | 30                  | $\dashv$ | +      | ╅      | ╈      | +-         | $\vdash$ | Н                                                | Н               | 1  |
| $\rightarrow$ | 31       | H  | ┿      | +            | +        |          | -             | -                                                | ╁╌                                               | +      | +-                                               | 1 | $\vdash$ | 81        | <del>                                     </del> | _        | ╁            | Н              | $\dashv$ | $\dashv$ |          | _        | ┥        | $\vdash$ |       | 31                  | +        | +      | 十      | +      | +          |          | $\vdash$                                         | Н               | ĺ  |
| $\overline{}$ | 32       | Н  | +      | +            | $\dashv$ |          | -             | $\vdash$                                         | +-                                               | +      | +-                                               | 1 |          | 82        | ┢                                                |          | ╁┈           | -              | $\dashv$ | -        | $\dashv$ | -        | ┪        | $\vdash$ |       | 32                  | $\dashv$ | +      | ╈      | +      | +          | $\vdash$ |                                                  | Н               |    |
|               | 33       | Н  | +      | +            | ┪        |          | <del> </del>  | H                                                | $t^-$                                            | ╁      | ╁╌                                               | 1 |          | 83        | ╁┈                                               |          | $\vdash$     |                |          | -        | $\dashv$ |          | ┨        | $\vdash$ |       | 33                  | +        | +      | +      | t      | +          | H        |                                                  | Н               |    |
|               | 34       | H  | +      | +            | $\dashv$ | _        | Η-            | <del>                                     </del> | +                                                | +      | +-                                               | 1 |          | 84        | $\vdash$                                         | H        | $\vdash$     | $\vdash\vdash$ | $\dashv$ | -        | $\dashv$ | -        | $\dashv$ |          |       | 34                  | +        | +      | +      | +      | +          | $\vdash$ |                                                  | H               |    |
| -             | 35       | H  | +      | +            | $\dashv$ |          | $\vdash$      | <del>                                     </del> | +                                                | +      | +-                                               | 1 |          | 85        | $\vdash$                                         | H        | $\vdash$     | H              | $\dashv$ | $\dashv$ | ᅱ        | $\dashv$ | ٦.       | -        |       | 35                  | +        | +      | +-     | +      | †          | 1        | <del>                                     </del> | H               |    |
|               | 36       | H  | +      | +            | ┪        |          | $\vdash$      | $\vdash$                                         | +-                                               | +      | +                                                | 1 |          | 86        | $\vdash$                                         | $\vdash$ | $\vdash$     | Н              | $\dashv$ | -        | ┰        | -+       | 1        | -        | 1     | 36                  | +        | +-     | +      | +      | +          | $t^{-}$  | <del>                                     </del> | Н               |    |
| $\dashv$      | 37       | H  | +      | +            | $\dashv$ |          | $\vdash$      |                                                  | +                                                | +      | +                                                | 1 |          | 87        | $\vdash$                                         | $\vdash$ | $\vdash$     | $\vdash$       | $\dashv$ | $\dashv$ |          | $\dashv$ | $\dashv$ | -        |       | 37                  | $\dashv$ | +      | +      | +      | +          | $\vdash$ | <del>                                     </del> | Н               |    |
|               | 38       | H  | +      | +            | $\dashv$ | -        | $\vdash$      | ╁                                                | +-                                               | +-     | +                                                | 1 | <b>—</b> | 88        | $\vdash$                                         | $\vdash$ | $\vdash$     | Н              | $\dashv$ | -        |          | _        | $\dashv$ | -        |       | 38                  | +        |        | +      | +      | +          | $\vdash$ |                                                  | Н               |    |
|               | 39       | H  | +      | +            | 7        | -        |               | $\vdash$                                         | +-                                               | +      | +                                                | 1 |          | 89        | $\vdash$                                         | $\vdash$ | H            | H              | $\dashv$ | -        | $\dashv$ |          | 1        |          | 1     | 39                  | +        | +      | $\top$ | $\top$ | +          | $\vdash$ | $\vdash$                                         | Н               |    |
|               | 40       | H  | t      | +            | +        | -        | $\vdash$      | $\vdash$                                         | +                                                | +-     | +                                                | 1 | $\vdash$ | 90        | <del> </del>                                     | $\vdash$ | $\vdash$     | Н              | -        | $\dashv$ |          | _        | 1        |          |       | 40                  | +        | +      | $\top$ | +      | +          | $\vdash$ | $\vdash$                                         | Н               |    |
| $\dashv$      | 41       | H  | +      | +            | +        | -        | $\vdash$      | $\vdash$                                         | +                                                | +      | +                                                | 1 |          | 91        | <del>                                     </del> | $\vdash$ | $\vdash$     | $\vdash$       | $\dashv$ | $\dashv$ | 一        | _        | 1        | -        |       | 41                  | $\dashv$ | +      | +      | +      | +          | H        | H                                                | H               |    |
| -             | 42       | H  | +      | +            | $\dashv$ | $\dashv$ | $\vdash$      | $\vdash$                                         | +                                                | +      | +                                                | 1 |          | 92        | <del>                                     </del> | $\vdash$ | $\vdash$     | Н              | $\dashv$ | -        | $\dashv$ | $\dashv$ | +        | $\vdash$ | 1     | 42                  | $\dashv$ | +      | +      | +      | +-         | 1        | <del>                                     </del> | Н               |    |
|               | 43       | H  | +      | +            | $\dashv$ | -        | $\vdash$      | $\vdash$                                         | $\vdash$                                         | +      | +                                                | 1 | <b> </b> | 93        | ┢                                                | $\vdash$ | $\vdash$     | Н              | $\dashv$ |          | $\dashv$ | $\dashv$ | 1        |          |       | 43                  | +        | +      | +      | +-     | +-         | +-       | $\vdash$                                         | H               |    |
|               | 44       | ╢  | ╁      | +            | ┥        | -        | Η-            |                                                  | +                                                | +      | ╁                                                | 1 | -        | 94        | Η-                                               | $\vdash$ | -            | Н              |          |          |          | +        | -        | -        | 1     | 44                  | +        | +      | +      | +-     | +          | $\vdash$ | $\vdash$                                         | $\vdash$        |    |
| -             | 45       | H  | +      | +            | $\dashv$ | -        | $\vdash$      | $\vdash$                                         | +                                                | +      | +                                                | 1 | -        | 95        | $\vdash$                                         | $\vdash$ | ╁            | Н              |          | -        | $\dashv$ | +        | $\dashv$ | -        | 1     | 45                  | +        | +      | +      | +-     | ╁          | +-       | _                                                | $\vdash$        |    |
|               | 45       | H  | +      | +            | $\dashv$ | -        | $\vdash$      | $\vdash$                                         | +                                                | +-     | +                                                | 1 | $\vdash$ | 96        | ├                                                | ├─       | ├            | Н              |          | $\dashv$ | $\dashv$ | +        | $\dashv$ | -        |       | 46<br>46            | +        | +      | +      | ╁      | +          | +-       | -                                                | $\vdash$        | l  |
|               | 47       | H  | +      | +            | $\dashv$ |          | <u> </u>      | -                                                | ╁                                                | ╫      | +                                                | 1 | -        | 97        | <del> </del>                                     |          | <del> </del> | $\vdash$       | $\dashv$ | $\dashv$ |          |          | $\dashv$ | -        | 1     | <del>10</del><br>47 | +        | +      | +      | +-     | ╁          | +-       | $\vdash$                                         | $\vdash$        | ĺ  |
|               |          | ╢  | +      | +            | $\dashv$ | _        | <u> </u>      |                                                  | $\vdash$                                         | +      | +                                                | ł |          |           | $\vdash$                                         | $\vdash$ | $\vdash$     |                |          |          |          | +        | $\dashv$ | -        |       |                     | +        | +-     | +      | +-     | ╁          | $\vdash$ | -                                                | $\vdash \vdash$ |    |
|               | 48       | ┧  | +      | +            | 4        | -        | $\vdash$      | -                                                | ╀                                                | ╀      | +-                                               | 1 | <u></u>  | 98        | $\vdash$                                         | -        | ⊢            | Н              |          | -        |          | -+       | $\dashv$ | -        | +     | 48<br>49            | +        | +      | +      | +      | +          | $\vdash$ | -                                                | $\vdash$        |    |
|               | 49       | 9  | 4      | $\perp$      | _        |          |               | ļ                                                | ↓_                                               | 4      |                                                  | 1 |          | 99<br>100 | <b>—</b>                                         | _        | _            | Щ.             | $\Box$   |          | _        | -        | 4        | $\vdash$ |       | 50                  |          | +      | +      | +      | +-         | ₩        | ⊢                                                | ⊢               |    |